EFFECT OF ART INTEGRATED LEARNING ON 21st CENTURY LEARNING SKILLS OF COMMERCE STUDENTS OF HIGHER SECONDARY LEVEL

Synopsis

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Education

Submitted by

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1.0.0 INTRODUCTION

Education is a key instrument that helps in the acquisition of knowledge, skills, attitude and helps in the all-around development of the personality .Learning is a well-defined systematic process for attaining the desired goals and objectives. The entire pedagogical process should be triggered in the appropriate direction to achieve the desired results. Commerce and society are strongly interlinked with each other. Commerce Education is concerned with the study of knowledge, skills and abilities for dealing with trade, commerce, and industry. Most of the commerce teaching sessions are done in a monotonous way where the teacher plays an active role and students are passive listeners With the Incorporation of Art Integrated Learning Activities in commerce education may be served as a tool for the development of creativity, aesthetic sensibility, analytical thinking, and communication skills among students.

1.1.0ART INTEGRATED LEARNING

Art Integrated Learning is a method of teaching through and with the arts that establish connections between various art forms and other subjects (Burnaford, et al., as cited in Maneen, 2016).

Art Integrated Learning is a NCERT Initiative based on the recommendation of NCF -2005 of which position paper states that " Education through the arts, where learning takes place using different art forms as tools in teaching learning process". The Art Integration Model is intended to encourage experiential learning, in which each learner is given opportunity to engage in art experiences (both visual and performing arts) in order to better understand and study different topics. Arts-based learning experiences are crucial in fostering students' critical thinking, creativity, imagination, and innovative skills. These abilities are increasingly acknowledged as basic talents and competencies that all students required as part of comprehensive 21st-century schooling that integrates arts-based learning. (The National Task Force on the Arts in Education as cited in The Kennedy Centre).Arts integration is an inquiry-based curricular strategy that allows students to examine content and concepts from all disciplines through art processes in ways that connect art to real-world challenges and ideas. (Marshall, as cited in Sparks,. 2013)**.**

CBSE (2019) recommends Art Integration is a cross curricular approach based on a collaboration between the teaching the core curricula with the teaching of different Art forms (Visual/ Performing) , where different Art forms act as a primary pathways to deliver the teaching content(p.7).

Arts Integration is a teaching method in which students use an art form to create and express understanding. Students participate in the creative process to investigate mutually reinforcing linkages between an art forms and another curriculum subject in order to satisfy changing goals in both areas. The National Policy of Education (2020)states that "Art Integration is a cross-curricular pedagogical approach that utilizes various aspects and forms of art and culture as the basis for learning of concepts across subjects. As a part of the thrust on experiential learning, art-integrated education will be embedded in classroom transactions not only for creating joyful classrooms, but also for imbibing the Indian ethos through integration of Indian art and culture in the teaching and learning process at every level. This art-integrated approach will strengthen the linkages between education and culture" (p.12)

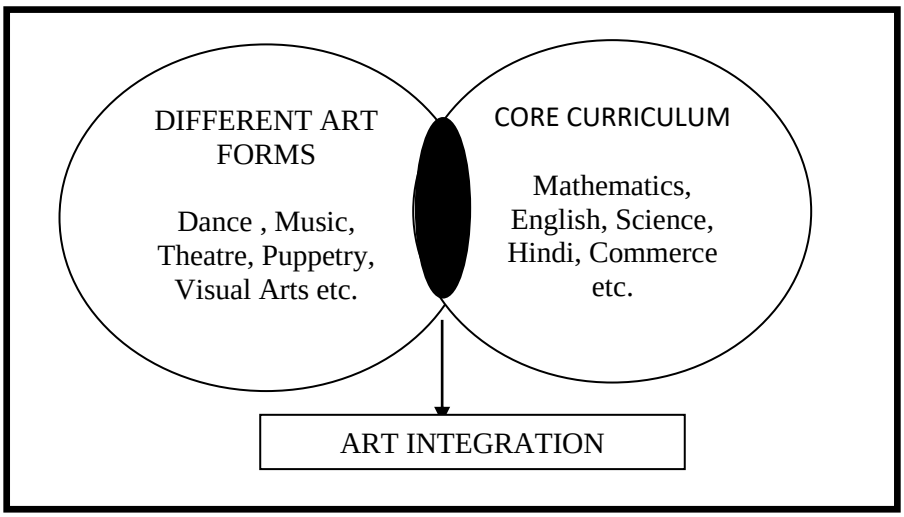
DIFFERENT ART FORMS
Dance , Music, Theatre, Puppetry, Visual Arts etc.
CORE CURRICULUM
Mathematics, English, Science, Hindi, Commerce etc.
ART INTEGRATION

Figure 1: Conceptual Framework

Arts integration provides students with a real-world setting with which to learn in the twenty-first century. It allows students to explore key concepts to learn and develop the critical abilities they will need to flourish in the world they will inherit. (Burdette, M. 2011)

1.2.0 HISTORICAL BACKGROUND OF 21st CENTURY SKILLS

The term 21st Century Skills "is an overarching concept for the knowledge, skills and disposition that need to be able to contribute to the knowledge society."(Voogt &Roblin, as cited in Joynes, 2019,

p.6)21st Century skills are served as an outcome of Experiential Learning. The following literature review brings forth various frameworks that define the historical background of 21st Century Skills.

Table 1: Various Framework of 21st Century Skills

VARIOUS FRAMEWORKS	RECOMMENDATIONS
The Delors Report (1996) , proposed one of the first Framework to identify competencies needed in coming century .UNESCO established four pillars of Education on 21st Century under chairmanship of Jacques Delors (2001)	Four Principles such as • Learning to know • Learning to do , • Learning to Live together • Learning to be
WHO categorized Life Skills (1999)	Life Skills such as • Decision Making & Problem Solving • Creative Thinking & Critical Thinking • Communication & Interpersonal Skills • Self Awareness& Empathy • Coping with Emotions & Coping with Stress
National Curriculum Framework (2005)	National Curriculum Framework recommends Development of Life Skills such as • Critical thinking Skills • Interpersonal Skills • Negotiation /Refusal Skills • Decision Making / Problem Solving Skills • Coping &Self Management Skills
Organisation for Economic Cooperation and Development (OECD) 2009	The document 21st Century Skills and Competencies for New Millennium Learners in OECD Countries describes three major dimensions for 21st Century Skills includes : • Communication , • Information , Ethics • Social Impact
21 Partnership for 21st Century Skills (P21) proposed a framework for 21stCentury , identified essential skills requires in twenty-first Century (P21 , 2007 , 2011)	Partnership for 21st Century Skills categorized eleven competencies categorized in three major skill sets such as • **Learning and Innovation Skills.(4Cs)** : Critical Thinking , Creativity , Collaboration & Communication • **Literacy Skills :**Information , Media and Technological Skills • **Life Skills :**Flexibility and Adaptability , Leadership and Responsibility , Initiative and Self Direction , Social & Cross-Cultural Interaction

1.3.0 21stCENTURY LEARNING SKILLS – FOUR Cs

In present scenario of teaching learning process, teachers are not only responsible for imparting content knowledge to students; they also help in developing skills. The overarching goal is to develop and grow future-ready learners who are prepared to apply the knowledge in real life setting. (Hoisington, 2020).Partnership for 21st Century Skills (P21), a coalition of business leaders and

educators, proposed a Framework for 21st Century Learning, identified essential competencies and skills vital for success in twenty-first century work and life (P21as cited in CBSE 2020)

Partnership for 21st Century Skills Framework P21 (2009) provides a comprehensive framework for 21st-century learning. Students are required to think creatively, cooperate with others, implement innovations, reason effectively, utilise systems thinking, make judgments, solve problems, communicate clearly, and collaborate with others. The Framework identifies four outcomes which include (1) The Core Subjects and 21st Century Themes; (2) Learning and Innovation Skills (also known as the Four C's - Communication, Collaboration, Critical thinking, and Creativity); (3) Information, Media, and Technology Skills and (4) Life and Career Skills.

"It's essential to use the Four C's to engage students. Teaching the core curriculum subjects—math, social studies, and the arts—must be expanded to incorporate critical thinking, communication, teamwork, and creativity as educators educate students for this new global society. New technologies are needed to assist classroom teachers and education support professionals in their work, even as they implement new policies".(Stocks, as cited in Preparing 21st Century Students for a global society).

In a dynamic and ever growing global economy eqipping the learners with the essential 21st Century Skills to help them succeed in life. CBSE endeavours to prepare learners for the present century.The Central Board of Secondary Education (2020) has recommended about the Partnership for 21st Century Skills (P21) Framework identified a set of Four Learning Skills known as Four Cs which includes Critical Thinking ,Creativity, Collaboration and Communication.

4CS (LEARNING SKILLS) OF 21st CENTURY SKILLS

The four Cs of 21st Century Learning Skills are as follows:

1. **Critical Thinking:** Think analytically to evaluate and solve problems in a rational manner understand why and how something happens. Reach a conclusion based on a series of statements and to connect them logically, effectively analyse and solve different kinds of problems in innovative ways.
2. **Creativity and Innovation:** It refers to use a wide range of idea creation techniques to create new ways of thinking .It majorly emphasises on to Design, Imagine, Improvise, Innovate & Create something new and something to increase efficiency

3. **Collaboration:** It refers to the practice of working together in a team to achieve a common goal brainstorm for ideas and work in teams, to demonstrate ability to work effectively with diverse teams.
4. **Communication:** It refers to the practice of conveying and expressing ideas and thoughts. Identify purpose medium, recipient and context to communicate effectively, to articulate thoughts and ideas effectively using verbal and non verbal communication skills in a variety of form.

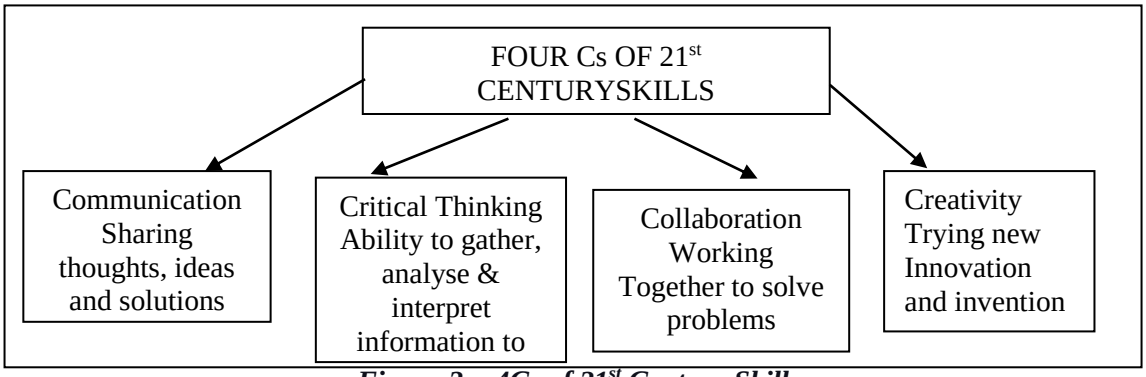
FOUR Cs OF 21st CENTURYSKILLS
Communication Sharing thoughts, ideas and solutions
Critical Thinking Ability to gather, analyse & interpret information to
Collaboration Working Together to solve problems
Creativity Trying new Innovation and invention

Figure 2 : 4Cs of 21st Century Skills

Teaching through the lens of 4Cs of 21st Century Learning Skills such as Critical Thinking, Communication, Collaboration and Creativity will help us and our students to stay in an ever changing work place. With the Learning skills students can learn how to take initiative& develop collaborative attitudes and solutions with these talents, which can help them to achieve success in future. (Hoisington, 2020).

Art Integration is an instructional strategy that connects the arts into core curricula; in which students engage, explore, experience and develop aesthetic standards and gain academic achievement.(Rabkin& Redmond, 2006)

1.4.0 LEARNING OBJECTIVES OF SENIOR SECONDARY SCHOOL CURRICULUM

CBSE (2020) recommends "Learning Objectives of Senior Secondary School Curriculum strives to:

- Achieve desired national level of competencies in cognitive, affective and psychomotor domains.
- Facilitate acquisition of 21st Century Skills and enhance self and social awareness through thematic or multidisciplinary approach.
- Promote Cooperative learning, Collaborative learning, Art Integrated learning etc. to facilitate realization of learning outcomes.

- Promote authentic assessments based on real world tasks involving meaningful application of knowledge & skills.
- Promote Life Skills, inculcate values, and foster cultural learning and international understanding in an interdependent society.
- Strengthen knowledge and attitude related to livelihood skills and promote lifelong learning."(p.1-2)

1.5.0 LEARNING OUTCOMES FOR COMMERCE EDUCATION (BUSINESS STUDIES)

NCERT (2019) recommends" Learning Outcomes for Business Studies are as follows:

The Learner:

- Recognizes, draws relationships and narrate processes concepts in business.
- Classifies and compares forms of business.
- Analyses and Evaluate Business scenario
- Recognizes, draws relationships and narrate processes concepts in business
- Classifies and compares aspects of Business Finance and Marketing Management.
- Analyses and Evaluates business scenario shows sensitivity and appreciation skills."(p.195-200)

1.6.0 ART INTEGRATION IN THE FIELD OF COMMERCE EDUCATION

Art Integrated Learning in Commerce Education; act as an interdisciplinary approach of teaching learning in which students explore and investigate critically and develop creativity for deeper understanding of the topics related to Commerce Education.

Art Integrated Learning encourages expression through different art forms such as Visual and Performing Arts which fosters imagination, creativity and innovation among students. Acquisition of 21st Century Skills is one of the objectives of CBSE School Curriculum; Integration of different art forms in commerce education will help in achieving the objectives.

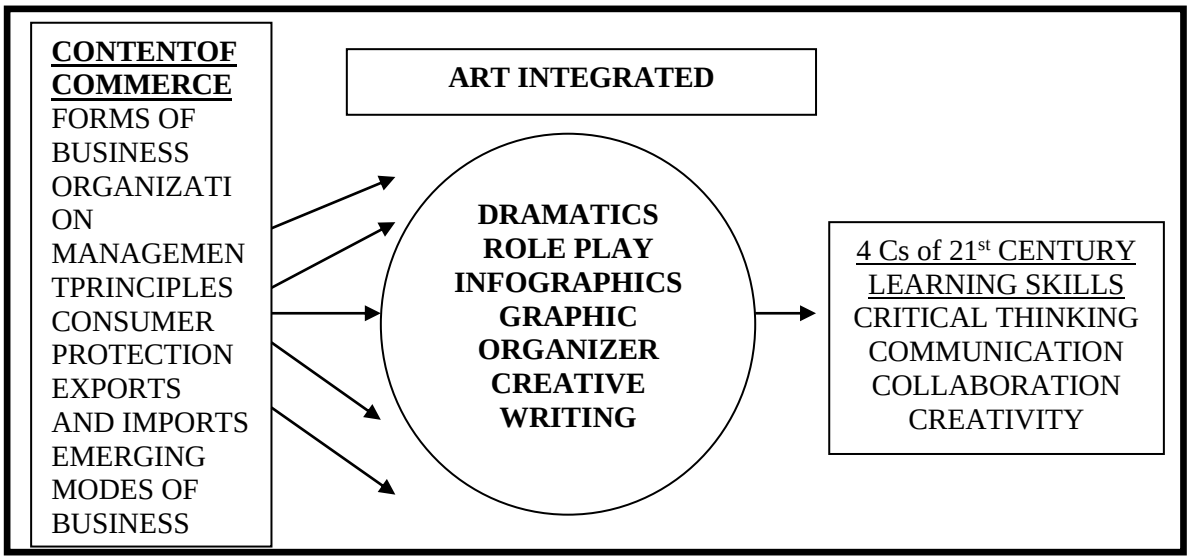

Figure 3: Art Integrated learning Activities in the field of Commerce to develop 4Cs of 21st Century Skills

Fig. 3 illustrates the use of different Art Integrated Activities that will be used in the teaching of commerce content for the development of four Cs of 21st Century Learning Skills. For Example: Researcher will use different Art Integrated Activities such as Drama, Role Play, Creative Writing, Graphic Organizer, Info graphics etc. These activities can be used for teaching different concepts of commerce such as Forms of Business Organization, Different Types of Partners, Prices of Shares of Selected Companies, Exports & Imports, etc. which will help in strengthening knowledge and to develop future-ready learners, who will be able to apply their theoretical knowledge in their real life settings.

The Kennedy Center's Changing Education through the Arts (CETA) states that the Integration of Arts contributes significantly to the development of 21st Century knowledge, skills and attitudes. Art Integration ; a powerful tool to build a new learning environment consistent with the cognitive and expressive needs of twenty –first century by developing critical thinking ,creativity ,imagination ,and innovation.

2.0.0 EMERGENCE AND JUSTIFICATION OF THE PROBLEM

Education plays an important role in the development of any nation. The evil of rote learning has plagued in Indian Classrooms since time immemorial. With the revolution of globalization there is a glimmer hope of education being rescued from the clutches of rote learning. Thus there is an urgent need of moving away from rote learning in order to truly practice student centric, activity based

learning and experiential learning in the field of Commerce Education. With the aim to discourage rote learning CBSE (2019) recommends that Art must be integrated with the teaching and learning process ; to promote active / experiential learning for " connective knowledge to life outside the school , ensuring the learning shifts away from rote methods and for enriching the curriculum so that it goes beyond textbooks."(p.15).There is a growing need of using the teaching methods which connect student's real life experiences in teaching learning conditions. As Commerce stream has large number of career options such as accounting, office management, teaching, entrepreneurship etc. Commerce Subject cannot be mastered by mere rote learning of the basic rules. Commerce Stream has art and creativity beneath that can be stirred up by incorporating different Art Integrated Activities in the field of Commerce. In comparison to traditional teaching methods, Students who received Art Integrated Lessons improved their capacity to judge their learning & reported that Art Integrated Learning enhanced the intrinsic motivation and promote learning for better understanding (Morris,2002)

CBSE(2019)recommends "Art Integrated Learning provides a path to all the stakeholders of school education for Art Integrated Learning as pedagogy and its innate relevance to the education system Learners explore creatively while building connections between different concepts through various art forms. Art experiences, both in visual (drawing and painting, clay modelling, pottery, paper crafts, mask and puppet making, heritage crafts etc.) and performing arts (music, dance, theatre, puppetry etc.) lead to a better understanding and construction of knowledge about different concepts. Arts have the flexibility to accommodate age-appropriate opportunities for learners who can explore these things at their individual pace. This resonates with the experiential learning approach."Art Based Instruction is better than conventional Instruction it helps in enhancing long term memory for science students (Mariale M .Hardimana, 2019).

"Twenty-first –Century learning embodies an approach to teaching that marries content to skill, the 21st Century learning paradigm offers an opportunity to synergize the margins of the content to help us navigate our future." (Wessling, as cited in Begum, 2019, p.223).The Kennedy Center emphasized that Art Integration is an interdisciplinary approach that demonstrate different ways to accomplish the fusion. With the incorporation of Art Integration it helps to develop dual content knowledge among students as well as helps in enhancing skills in four Cs such as Critical Thinking, Communication,

Creativity and Collaboration. As comparison to Traditional Methods, Collaborative Learning Inquiry Model is better to improve the 4C skills of physics students. (Sipayung et.al.,2018,p.440) 21st Century Curriculum should blend of Knowledge , thinking , innovation skills media ,Information and Communication Technology ICT Literacy and real life experiences in the context of core academic subjects. (Paige, as cited in Alismail, 2015, p.150)

Malaysia Ministry of Education (MMOE) defines that "21st Century Learning as a learning process which is student centered based on elements consist of critical thinking, collaboration, communication and creativity as well as applying ethics." (MMOE as cited in Rusdin &Ali , 2019,p.1023).

According to P21 Framework ,the Four Cs such as Critical Thinking , Collaboration , Creativity & Communication of 21st Century Learning Skills, that students should master in their classroom which can also help them to prepare for their life ahead .Integration of Four Cs of 21st Century Skills need to be integrated into Classrooms , Schools and district around the country to produce future ready citizens and employees adequately for 21st Century (Chiruguru ,2020)

Some important researches in the area of art integration have been marked in the below given table:

Table 2 : Researches related to Art Integrated Learning& 21st Century Skills

YEAR	RESEARCHER	RESEARCH ASPECT	RESULTS
2013	Sukmin, K	Towards a Holistic Pedagogy of Art Integration	Holistic way of Arts Integration helps in transforming schools into learning communities for a better chance of learning.
2014	Susan, H	Creativity in an Arts Integrated Third Space : A Case Study of Elementary School Students in an International Collaboration	Creativity evolved throughout the collaboration & Students work in new modes of communication in order to bridge cultures with the use of Art Integration
2016	Randolph, D	Arts Integration Curriculum : Building Relational Capacities	Arts Integration has the potential to build relational & Social Self Efficacy
2017	Hardiman	The Effects of Arts-integrated instruction on memory of Science Content	Strong Co relational Evidence suggest involvement in Arts improve students memory of learning events
2017	Krakur, L	Arts Integration for understanding : Deepening Teacher practice in and through the Arts	Teaching in and through the arts can support learners in constructing communicating and have a deeper understanding of the concepts.
2018	Halversen, A	21st Century Skills and 4Cs in the English Language Classroom in Oregon	4 Cs considered as a key skills for 21st Century Learners in English Language Classroom

2019	Bani-Hamad & Abdullah	Effect of Project-Based Learning to improve the 21st Century Skills among Emirati Secondary Students in Abu Dhabi	Project Based Learning has significant effect on improvement of 21st Century Skills
2019	Landan, K	Students Perception of learning in 21stCentury : An Evaluation of the 4 Cs	Findings suggest that It is essential that educational leaders acknowledge &continue to support the incorporation of 4Cs into daily instruction.
2020	Fatwati, F	The Implementation of 4Cs in Islamic Studies Learning at Curriculum in Puwokerto	Difficulties faced by teacher in integrating 4Cs in Islamic Studies learning

After going through the literature review of the areas selected, it is found that currently there is a deficit in literature related to Art Integration in the field of Commerce Education. Few national & international studies have been done on Art Integration in areas such as Hindi, English, Mathematics, Science and Islamic Studies. In some studies effect of project based learning, holistic pedagogy on 21st Century Skills has been studied. After undergoing the process of reviewing the researches, the following questions kept in the mind of the researcher in the context of Art Integrated Learning in the field of Commerce are as follows:

- How Art can be integrated with Commerce Education?
- Does Art Integrated Learning help in developing Critical Thinking Skills of Commerce Students?
- Does Art Integrated Learning help in developing Communication Skills of Commerce Students?
- Does Art Integrated Learning help in developing Collaboration Skills of Commerce Students?
- Does Art Integrated Learning help in developing Creativity Skills of Commerce Students?

These questions led the researcher to formulate the problem of the study.

3.0.0 STATEMENT OF THE PROBLEM

In context with the above justification , the problem in hand can be stated as "*Effect of Art Integrated Learning on 21st Century Learning Skills of Commerce Students of Higher Secondary Level .*"

4.0.0 OPERATIONAL DEFINITION OF THE TERMS

4.1.0 ART INTEGRATED LEARNING

Silverstein and Laynne (2010) defines that Art Integration is "An approach to teaching in which students construct and demonstrate understanding through an art form. Students engage in a creative

process which connects an art form and another subject and meets evolving objectives in both." (, p.2)

OPERTIONAL DEFINITION

In the present study , Art Integrated Learning refers to a methodology where different art forms are used as a medium of teaching and learning ; a key to understanding concepts of Commerce with integration of different Art Integrated Learning Activities. These Activities will consist of Role Playing, Dramatics, Creative Writing, Graphic Organizers & Info graphics.

4.1.1 21ST CENTURY SKILLS

"21st Century Skills as the knowledge, skills and attitudes are necessary to be competitive in the twenty –first century workforce, participate appropriately in an increasingly diverse society, use new technologies and cope with rapidly changing workplaces." (Scott as cited in Joynes, Rossignoli &Amonoo 2019, p, 8).

OPERATIONAL DEFINITION

In the present study 21st Century Skills includes the Learning and Innovation Skills which is also known as Four Cs which includes Critical Thinking , Collaboration , Communication and Creativity.

4.1.2 CRITICAL THINKING

Partnership for 21 Framework (2011) stated that "Critical Thinking as**:**

Reason Effectively: Use various types of reasoning (inductive, deductive, etc.) as appropriate to the situation ;**Use Systems Thinking :**Analyze how parts of a whole interact with each other to produce overall outcomes in complex systems**. Make Judgments and Decisions** :Effectively analyze and evaluate evidence, arguments, claims and beliefs , Analyze and evaluate major alternative points of view, Synthesize and make connections between information and arguments, Interpret information and draw conclusions based on the best analysis &Reflect critically on learning experiences and processes**;** **Solve Problems**: Solve different kinds of non-familiar problems in both conventional and innovative ways, Identify and ask significant questions that clarify various points of view and lead to better solutions ."(p.4)

OPERATIONAL DEFINITION

In the present study Critical Thinking will be used as a mode of thinking to develop concepts of commerce education critically, rationally& independently which can further help in evaluating ideas.

4.1.3 COLLABORATION

Partnership for 21 Framework (2011) stated that "Collaboration as:

• Demonstrate ability to work effectively and respectfully with diverse teams

• Exercise flexibility and willingness to be helpful in making necessary compromises to accomplish a common goal

• Assume shared responsibility for collaborative work, and value the individual contributions made by each team member."(p.4)

OPERATIONAL DEFINITION

In the present study Collaboration refers the ability to engage students of commerce among each other respectfully, work together effectively, share the responsibility and collaborate with each other in diverse teams in different art integrated activities.

4.1.4 COMMUNICATION

Partnership for 21 Framework (2011) defines"Communication as

- Articulate Thoughts and ideas effectively using oral, written and non verbal communication skills in a variety of forms & context.
- Listen effectively to decipher meaning, including knowledge, values, attitudes and intentions.
- Use communication for a range of purpose e.g. to inform, instruct, motivate & persuade.
- Use multiple media &technologies, and know how to judge their effectiveness a priori as well as assess their impact & Communicate effectively in diverse environments."(p.4)

OPERATIONAL DEFINITION

In the present study Communication refers to the ability to express one's thoughts, ideasand feelings clearly persuasively, articulates opinions, present ideas using verbal and non verbal skills of communication which can expand learning possibilities & promote overall experience of commerce students.

4.1.5 CREATIVITY

Creativity is the ability to create original ideas, connections, alternatives, or possibilities that are effective in solving problems, communicating with others and inspiring new and useful ideas in others."(Frankeen, as cited in Reeves, 2014, p.72).

OPERATIONAL DEFINITION

In the present study Creativity is defined in terms of the ability to think creatively, generate innovative ideas &solutions .With the infusion of Art Integrated learning in Commerce students, think and work creatively, invoke innovative ways of thinking and convert the imaginative ideas into reality.

5.0.0 OBJECTIVES OF THE STUDY

1. The objectives of the present study are as follows:
2. To analyze the content of Class XI Commerce with reference to Art Integrated Learning.
3. To develop an Art Integration Intervention Programme for Commerce Students.
4. To study the effect of Art Integrated Learning on Critical Thinking Skills of Commerce Students.
5. To study the effect of Art Integrated Learning on Collaboration Skills of Commerce Students.
6. To study the effect of Art Integrated Learning on Communication Skills of Commerce Students.
7. To study the effect of Art Integrated Learning on Creativity skills of Commerce Students.

6.0.0HYPOTHESES OF THE STUDY

The following hypotheses will be formulated for achievement of objectives are as follows:

1. H_{a1}**:** There will be a significant effect of Art Integrated Learning on Critical Thinking Skills of Commerce Students.
2. H_{a2}: There will be a significant effect of Art Integrated Learning on Collaboration Skills of Commerce Students.
3. H_{a3}: There will be a significant effect of Art Integrated Learning on Communication Skills of Commerce Students
4. H_{a4}: There will be a significant effect of Art Integrated Learning on Creativity Skills of Commerce Students.

7.0.0 DELIMITATIONS OF THE STUDY

The study will be delimited in the following ways:

1. The study will be delimited to Agra city only.
2. The study will be confined to CBSE Board.
3. The study will be conducted on XI Class students.
4. The study will be delimited to XI Grade level of Business Studies Subject.
5. The study will be delimited to 4Cs of 21st Century Skills i.e. Communication, Collaboration, Creativity & Critical Thinking Skills.
6. The study will be delimited to following of the Art Integrated Activities such as: Performing and Literary Arts: Dramatics, Role playing, Creative Writing , Visual Arts: Graphic Organizers, Info graphics.

8.0.0 VARIABLES OF THE STUDY

The variables related to present study are depicted as follows:

- Independent Variable : Art Integrated Learning
- Dependent Variables: Critical Thinking , Collaboration , Communication , Creativity
- Controlled Variables :Age , Grade , Subject, School Board

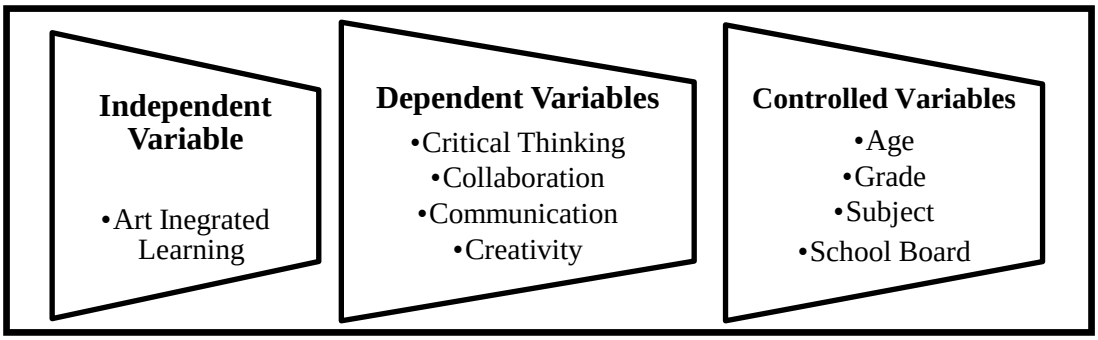

Figure 4: Variables of the Study

10.0.0 RESEARCH METHODOLOGY &DESIGN OF THE STUDY

Quasi Experimental Research Method will be used in the present study and the Two group Non equivalent pretest post test design will be used in the present study.

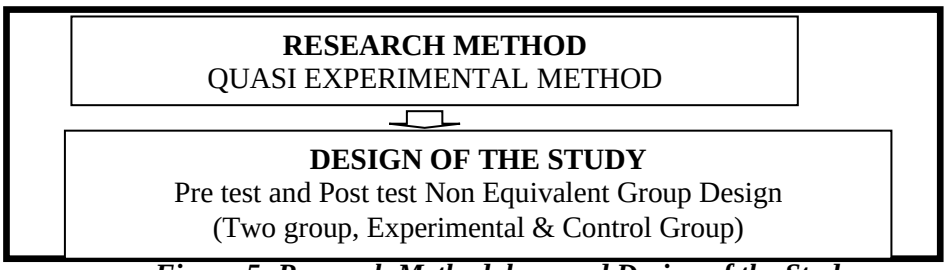
RESEARCH METHOD
QUASI EXPERIMENTAL METHOD
DESIGN OF THE STUDY
Pre test and Post test Non Equivalent Group Design
(Two group, Experimental & Control Group)

Figure 5: Research Methodology and Design of the Study

9.0.0 POPULATION SAMPLE AND SAMPLING TECHNIQUE

In this study, Multi Level Mixed Method Sampling will be used by the researcher. Mixed Method Sampling involves combining probability and non probability sampling techniques in creative ways to answer research questions. (Teddlie, C.2007).Population of the Study will be XI Grade Students of CBSE School from Agra City, 100 Students of XI class of Commerce group will be selected as sample of the present study. In the First Phase, Purposive Sampling will be used for school & class selection from Agra City, Random Sampling will be used for the selection of the section which will be a collectively representation of the sample. Intact Sampling will be used for assigning the Sections of Commerce as Experimental and Control group.(Intact Group)As the Sampling Process is well defined and will be able to select proper representative of the sample from the population therefore this sampling design will ensure the accuracy of estimates in the study.

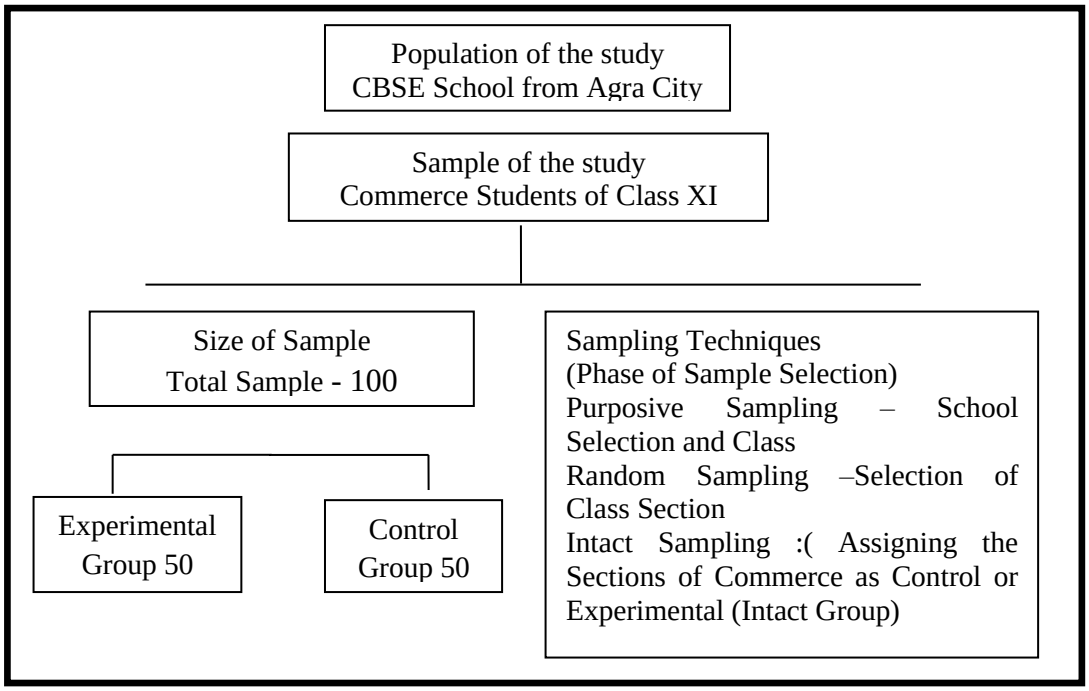
Population of the study
CBSE School from Agra City
Sample of the study
Commerce Students of Class XI
Size of Sample
Total Sample - 100
Sampling Techniques
(Phase of Sample Selection)
Purposive Sampling – School Selection and Class
Random Sampling –Selection of Class Section
Intact Sampling :(Assigning the Sections of Commerce as Control or Experimental (Intact Group)
Experimental Group 50
Control Group 50

Figure 6. Population & Sample of the Study

11.0.0 INTERVENTION DEVELOPMENT PROGRAMME

Intervention Development Programme involves the following steps are as follows

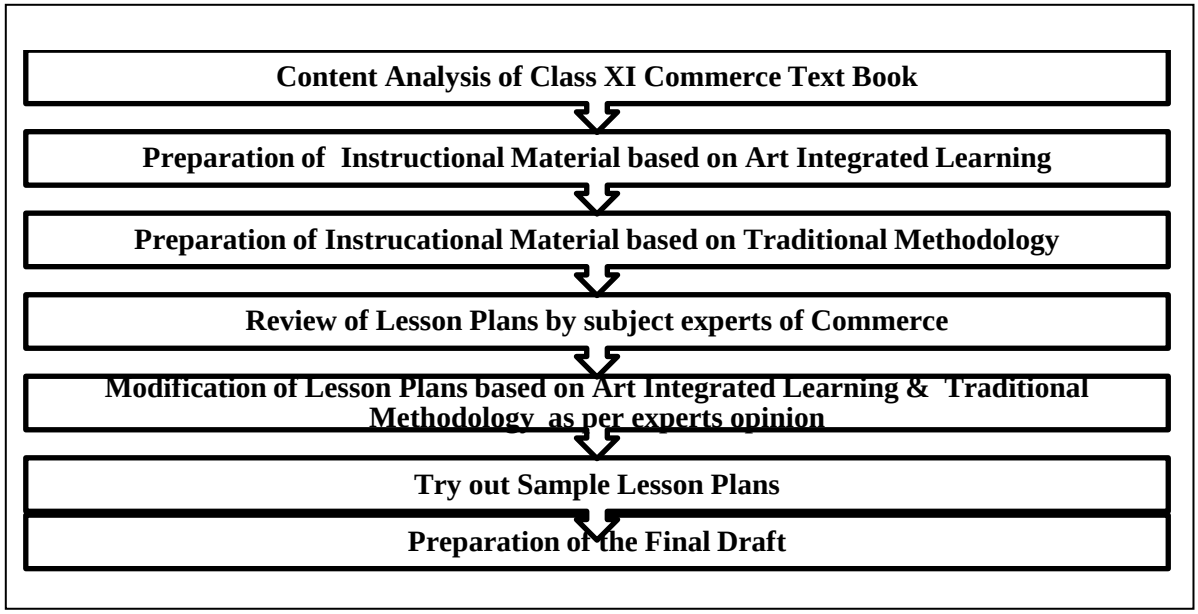
Content Analysis of Class XI Commerce Text Book
Preparation of Instructional Material based on Art Integrated Learning
Preparation of Instrucational Material based on Traditional Methodology
Review of Lesson Plans by subject experts of Commerce
Modification of Lesson Plans based on Art Integrated Learning & Traditional Methodology as per experts opinion
Try out Sample Lesson Plans
Preparation of the Final Draft

Figure7: Steps of Intervention Development Programme

12.0.0 PREPOSTNON EQUIVALENT GROUP TESTING & INTERVENTION PLAN

The design of the experiment will be a Two group Non Equivalent Pre-Test Post –Test design in which Intact Group will be chosen by the researcher for selection of a sample , because where the randomization of sample unit is not done then there are less chances of equivalent groups Thus, Two group pretest post test non equivalent design will be used. The following table depicts the Pre-test &Post test Non-Equivalent group Design & Intervention Plan:

Table 3: Pre Post Non Equivalent Group Testing & Intervention Plan

GROUPS	**PRE TREATMENT PHASE**	**IMPLEMENTATION PHASE**		**POST TREATMENT PHASE**
EXPERIMENTAL GROUP (Intact Group)	Pre Testing of Variables Critical Thinking Collaboration Communication Creativity	**TREATMENT** 30 Lessons will be taught by using Art Integration to Commerce Students	**PERIOD & HOURS OF INTERVENTION** 12 week and 35 minutes Daily	Post Testing of Variables Critical Thinking Collaboration Communication Creativity
CONTROL GROUP (Intact Group)	Pre Testing of Variables Critical Thinking Collaboration Communication Creativity	30 Lessons will be taught by using Traditional Methodology to Commerce Students	12 week and 35 minutes Daily	Post Testing of Variables Critical Thinking Collaboration Communication Creativity

13.0.0 TOOLS OF THE STUDY

30 Lesson Plans will be prepared by the researcher in traditional as well as Art Integrated Learning

Method. Every Lesson Plan will be planned from the CBSE Board Curriculum prescribed for Class XI .Following Self Constructed will be used in the present Study:

1. **Collaboration Skills.**
2. **Communication Skills**.

Following Standardized tools will be used in the present study:

1. **Critical Thinking Skills**

- Name of the Tool :Critical Thinking Scale by C.G Venkatesha Murthy in 2014 (English)
- Age Range: 14-18 yrs.
- Validity of the scale was subjected to Content Validity.
- Reliability of the Scale: The reliability measures were calculated on a sample of 1219 students with age range of 14 up to 18. Reliability was calculated using Cronbach ‘s alpha (Cronbach ‘s alpha = 0.752)

2. **Creativity Skills**

- Name of the Tool : Passi Test of Creativity by B.K. Passi in 2006 (Hindi /English)
- Grade : X-XI
- It measures Fluency, Flexibility Originality.
- This test includes six sub tests, first three tests are verbal & last three tests are non verbal in nature.

14.0.0 STATISTICAL TECHNIQUES

- **Descriptive Statistics**: Mean, Standard Deviation, Skewness and kurtosis will be used to know the nature of data.
- **Inferential Statistics**: Analysis of Co-Variance (ANCOVA) will be used for comparison between control and experimental group differences by controlling covariate effect.
- **Graphical Presentation:** Graphical representation will be used for presenting data and results in visual form.

15.0.0 SIGNIFICANCE OF THE STUDY

"Art can be the spark that engages students and draws them into learning." (Burnaford et al., as cited in Ross 2008 p.8). Art Integration is an incorporation of different Art forms such as Performing and Visual Arts in core curricula for better understanding of concepts. It also helps in increasing relevance by integration of art forms and subject matter. It helps in exposing students to different art forms that lead to stimulate all senses and gain deeper understanding of concepts. Art Integrated Learning helps in developing a greater sense of motivation among students and act as a tool to help in better understanding of concepts. (Anderson ,2013).The Integration of Art in classroom helps in bringing creativity and students engagement into the classroom .In this global world Framework for 21st Century Skills helps in preparing future ready students and helps in providing opportunities to learn 21st Century Skills. Art Integrated Learning and 4Cs may be perceived as a tool in teaching learning process to prepare students who can compete globally in the future .It helps the students to connect and engage with different concepts of commerce by giving form and helps in developing sensory representation to learning and cognition. Through the development of 4Cs such as Critical Thinking, Creativity, Collaboration & Communication, Art Integrated Learning offers a way to create a positive learning environment with cognitive and expressive demands and needs of 21st Century. Art Integrated Learning helps the students to articulate thoughts through verbal and nonverbal mode and develops team work. Four Cs is a 21st Century Learning trend in today's global community. In this global era, if students want to compete in the global community, they also must be good communicators, critical thinkers, creators and collaborators

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